

CLAIM AMENDMENTS

This listing of claims will replace all prior versions and listings of claims in the application.

1-26. (Canceled)

27. (New) A method of using Domain-Based Rerouting (DBR) with Active Connection Modify (ACM) for a connection in a communication system, the connection initially lying along an original connection between a source node and a destination node, the original connection conforming with at least one original traffic parameter, the method comprising:

receiving, in an ACM controller, an ACM request from a user;

determining whether the received ACM request is either a protected ACM request or a protected and enabling (P&E) ACM request;

when the received ACM request is the P&E ACM request, establishing an alternate connection between the source node and the destination node using DBR, wherein the alternate connection conforms to new traffic parameters in the received ACM request;

when the received ACM request is the protected ACM request, establishing the alternate connection between the source node and the destination node using DBR, wherein the alternate connection conforms to original traffic parameters;

determining whether the alternate connection was actually established;

when the alternate connection was actually established, monitoring for receipt of a MODIFY REJECT (MOD REJ) message at the source node;

when a MODIFY REJECT message is received at the source node, determining whether the received ACM request is either the protected ACM request or the P&E ACM request;

when the received ACM request is the P&E ACM request, switching to the alternate connection and tearing down the original connection; and

when the received ACM request is the protected ACM request, maintaining the original connection and tearing down the alternate connection.

28. (New) The method of claim 27, further comprising:

when no alternate connection was established, rejecting the ACM request.

29. (New) The method of claim 28, further comprising:

after rejecting the ACM request, informing the user that the ACM request was rejected.

30. (New) The method of claim 27, further comprising:
initiating a timer with the ACM controller.
31. (New) The method of claim 30, further comprising:
launching a MODIFY REQUEST (MOD REQ) message to a downstream node
along the original connection.
32. (New) The method of claim 30, further comprising:
when receiving a MODIFY ACKNOWLEDGE (MOD ACK) message before
expiry of the timer, dropping the alternate connection.
33. (New) The method of claim 30, further comprising:
when expiry of the timer occurs before receipt of any ACM-related messages
at the source node, performing a hitless switch with the ACM controller to the
alternate connection.
34. (New) The method of claim 27, wherein the communication system has at
least one intermediate node between the source node and the destination node.

35. (New) The method of claim 34, wherein the communication system has at least two intermediate nodes between the source node and the destination node.

36. (New) The method of claim 35, wherein each intermediate node provides a different connection between the source node and the destination node.